

Date: Wednesday, 15/04/2009 9:48:46 AM  
 User: Julie Dawson

## Process Sheet

<b>Customer</b> : CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> : STEP WELDMENT
<b>Job Number</b> : 47207	
<b>Estimate Number</b> : 12576	
<b>P.O. Number</b> :	<b>Part Number</b> : D3562041
<b>This Issue</b> : 15/04/2009 <b>S.O. No.</b> :	<b>Drawing Number</b> : D3562 REV E
<b>Prsht Rev.</b> : NC	<b>Project Number</b> : N/A
<b>First Issue</b> : / / <b>Type</b> : LARGE FAB ASSY	<b>Drawing Revision</b> : E
<b>Previous Run</b> : 46551	<b>Material</b> :
<b>Written By</b> :	<b>Due Date</b> : 10/05/2009 <b>Qty:</b> 4 <b>Um:</b> Each
<b>Checked &amp; Approved By</b> : <u>JLD 09.04.15</u>	
<b>Comment</b> : Est Rev:A New Issue 06-11-09 JLM Est rev B ECN 987 07.10.09 EC verified by: DD Est Rev:C ECN1048 07-12-18 DD verified by:ec Est Rev:D 08-07-28 add chemical conversion coat DD verified by:EC Est Rev:E 09-02-27 (seq13) QC9 to QC10 DD verified by:EC	

## Additional Product

Job Number:



<b>Seq. #:</b>	<b>Machine Or Operation:</b>	<b>Description :</b>
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✓ 1.0	D2622120C	Step Extrusion
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**Comment:** Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

Qty	Part #	Description	Batch:
1	D2622-120C	Extrusion	B44064 x 1 B45949 x 3

Check Material for any Dents or Defects

SAD 09-04-28 (4)

2.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
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**Comment:** LARGE FABRICATION RESOURCE 1

1-Cut D2622 extrusion as per Dwg D3562

2-Deburr and bevel ends for welding

SAD 09-04-28 (4)

3.0	QC5	INSPECT WORK TO CURRENT STEP
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**Comment:** INSPECT WORK TO CURRENT STEP

S 09/04/28 (4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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Drawing Name: STEP WELDMENT

Job Number: 47207

Part Number: D3562041

Job Number:



Seq. #:

Machine Or Operation:

Description :

4.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

SAD 09-04-28 (4)

5.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

M-6 09/04/29

6.0

D3560041

Arm Weldment



Comment: Qty.: 1.0000 Each(s)/Unit Total: 4.0000 Each(s)

ARM WELDMENT

Batch: 346617

Ph 09.05.07 4

7.0

D3560043

Arm Weldment



Comment: Qty.: 1.0000 Each(s)/Unit Total: 4.0000 Each(s)

ARM WELDMENT

Batch: 346619

Ph 09.05.07 4

8.0

MS20600AD4W5

Blind Rivet



Comment: Qty.: 32.0000 Each(s)/Unit Total: 128.0000 Each(s)

Blind Rivet

batch: M110523

Ph 09.05.07 4

9.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

1- Transfer drill Rivet holes as per dwg D3562.

2-Touch-up rivet holes with alodine as per dwg d3562

3-Rivet legs using Magnabond as per dwg D3562.

\*\*\*\*\*Ensure to wipe off any excess magnabond \*\*\*\*\*

A/R Magnabond 6398

Batch: M109900

Ph 09.05.07 4  
Ph 09.05.07 4  
Ph 09.05.07 4  
Ph 09.05.07 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries

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Drawing Name: STEP WELDMENT

Job Number: 47207

Part Number: D3562041

Job Number:



Seq. #:

Machine Or Operation:

Description :

10.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

09/05/07

(x44)

11.0

D2734

Step End Plate



Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D2734

End Cap

843535

09.05.08 4

12.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Weld end caps as per Dwg D3562& QSI 004. Inspect for foreign objects as per QSI 024.

A/R Aluminum Rod M110130

09.05.08 4

2-Grind end cap welds flush as per Dwg D3562

SAN 09-05-11 18

13.0

QC10

VISUAL INSPECTION OF GROUND WELDS



Comment: VISUAL INSPECTION OF GROUND WELDS

BF 09-05-11 14

14.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

09/05/11 (x44)

15.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

09/05/12 (4)

16.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

13:45  
320°  
14:15

cmd/

09/05/13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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Drawing Name: STEP WELDMENT

Job Number: 47207

Part Number: D3562041

Job Number:



Seq. #:

Machine Or Operation:

Description :

17.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Wing Walk as per Dwg D3562 and QSI 005 4.4

Batch:

*M/11013*

*BR 09-05-14*

*(4)*

18.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



*dl*



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

*09-05-14*

*(A)*

19.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Assembly Kit

*6-A*

*09/05/15*

*(Y)*

20.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

*09/05/19*

Job Completion



*MF*  
*09-05-15*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

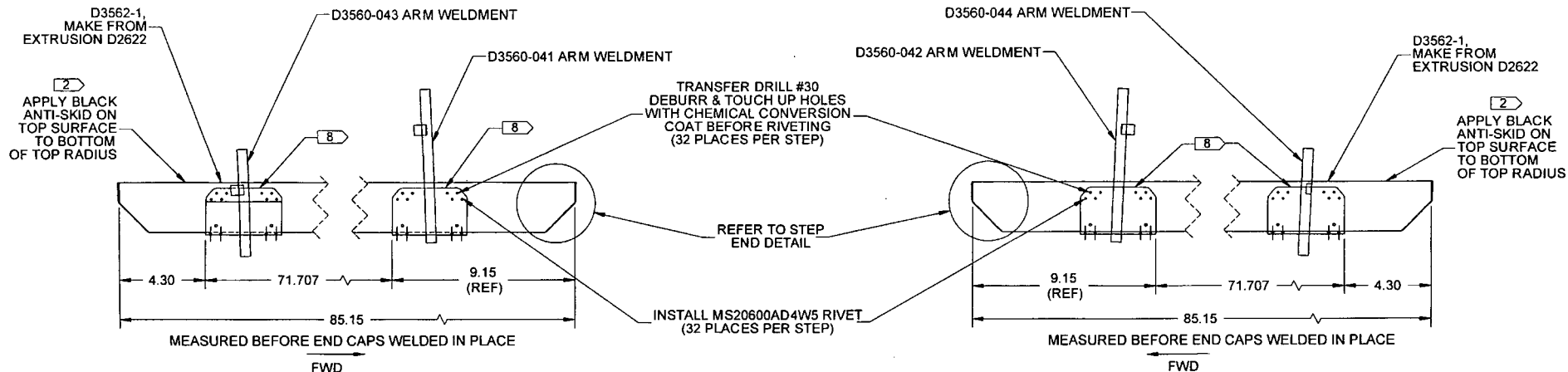
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries





**D3562-041 LH STEP ASSEMBLY**

**TYPICAL STEP END DETAIL  
SCALE 1:2**

**D3562-042 RH STEP ASSEMBLY**

**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH:
  - i) CHEMICAL CONVERSION COAT STEP EXTRUSION PER DART QSI 005 4.1 BEFORE ASSEMBLY
  - ii) POWDER COAT ASSEMBLY GLOSS WHITE (4.3.5.1) OR GREY SANDTEX (4.3.5.6) OR BLACK SANDTEX (4.3.5.7) OR GREEN SANDTEX (4.3.5.8) PER DART QSI 005 4.3
  - iii) BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 8.79 lbs
- 8) INSTALL ARM WELDMENTS WITH A LAYER OF MAGNOBOND 6398 BETWEEN THE ARM WELDMENT AND STEP EXTRUSION. FILL ANY TOOLING HOLES WITH MAGNOBOND 6398. CLEAN OFF EXCESS BEFORE POWDER COATING.
- 9) WELDING: PER DART QSI 004

QTY -041	QTY -042	P/N	DESCRIPTION
X		D3562-041	LH STEP ASSEMBLY
	X	D3562-042	RH STEP ASSEMBLY
1		D3560-041	ARM WELDMENT
	1	D3560-042	ARM WELDMENT
1		D3560-043	ARM WELDMENT
	1	D3560-044	ARM WELDMENT
32	32	MS20600AD4W5	RIVET
2	2	D2734	END PLATE

E	ADD QTY (2) TO D2734 END PLATE ON D3562-042	PH	08.01.11
D	REMOVE D2808 SPACER NOTE: REDRAWN IN SOLIDWORKS	DC	07.11.16
C	NOW MAGNOBOND, ADD D2808, REMOVE 4 RIVETS	CP	07.06.19
B	ARMS NOW RIVETED TO STEP	CP	07.01.15
A	NEW ISSUE	CP	06.09.26
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	08.01.11		

**DART AEROSPACE LTD**  
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D3562**  
REV. E  
SHEET 1 OF 1  
TITLE **STEP ASSEMBLY**  
SCALE 1:5

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